

Date: Tuesday, 12/20/2005 2:50:34 PM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: NUT PLATE ASSEMBLY	
Job Number	: 25298		Part Number	: D3178041	
Estimate Number	: 10812		Drawing Number	: D3178 REV. A	
P.O. Number	: N/A		Project Number	: N/A	
This Issue	: 12/20/2005 S.O. No. : N/A		Drawing Revision	: A	
Prsht Rev.	: NC		Material	: MARE in multiplys of 8	
First Issue	: N/A		Due Date	: 1/30/2006 Qty: 8	
Previous Run	: 25030			Um: Each	
Written By	<u>SEE COMMENT BELOW</u>				
Checked & Approved By	<u>SEE ABOVE USER</u>				
Comment	: Est:B 03.02.28 Modify Step 1,2,3,4,21,23 KJ/RF				

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	M5052H32S063	5052-H32 .063 Sheet	
		Comment: Qty.: 0.0365 sf(s)/Unit Total : 0.1462 sf(s) Material: 5052-H32/H34 (QQ-A-250/8) 0.063" thick (M5052H32S.063)	Batch: <u>M16454</u>
2.0	SHEAR	SHEAR	
		Comment: SHEAR Cut blanks: 3.00" x 1.520"	<i>mkl 06/02/20</i> 8
3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1	
		Comment: HAAS CNC VERTICAL MACHINING #1 Machine as per Folio FA296 and Dwg D3178 Identify as D3178-1	<i>mkl 06/02/20</i> 8
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE	
		Comment: INSPECT PARTS AS THEY COME OFF MACHINE	<i>mkl 06/02/20</i> 8
5.0	QC8	SECOND CHECK	
		Comment: SECOND CHECK	<i>Ep 06/02/20</i> 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Part Number: D3178041

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1  
1- C-sink D3178-1 holes as per Dwg D3178  
2- Deburr *SAD 06/02/20*

SB

06/02/21

(8)

7.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

FF. 06.02.21

8

9.0 QC3 INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT CHEMICAL CONVERSION COAT

W 06/02/21

8

10.0 MS20426AD34 RIVET



Comment: Qty.: 8.0000 Each(s)/Unit Total : 32.0000 Each(s)

RIVET

Pick:

Qty	Part Number	Description	Batch
8	MS20426AD3-4	Rivet	<u>M15786</u>

11.0 MS21059L3 Nut Plate



Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

Nut Plate

Pick:

Qty	Part Number	Description	Batch
4	MS21059L3	Nut Plate	<u>M14602</u>

SB 06/02/23

8

12.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble as per Dwg D3178

SB 06/02/23

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes  No  DQA:  Date: 6/6/2027  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: NUT PLATE ASSEMBLY

Job Number: 25298

Part Number: D3178041

Job Number:



Seq. #: Machine Or Operation:

Description :

13.0

QC5

INSPECT WORK TO CURRENT STEP



*Jan 02-24*

8

Comment: INSPECT WORK TO CURRENT STEP

14.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: STY11

*1/6/2007 (8)*

15.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

*DD 06/02/27*

Job Completion



*1/6/2007*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	25298
Description: Nut Plate	Part Number:	D3178-1
Inspection Dwg: D3178	Rev: A	Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

## X First Article Prototype

Measured by:	<u>TJL</u>	Audited by:	<u>SJ</u>	Prototype Approval:	N/A
Date:	06/02/20	Date:	06/02/20	Date:	N/A

<b>Rev</b>	<b>Date</b>	<b>Change</b>	<b>Revised by</b>	<b>Approved</b>
A	04.02.25	New Issue	KJ/RF	

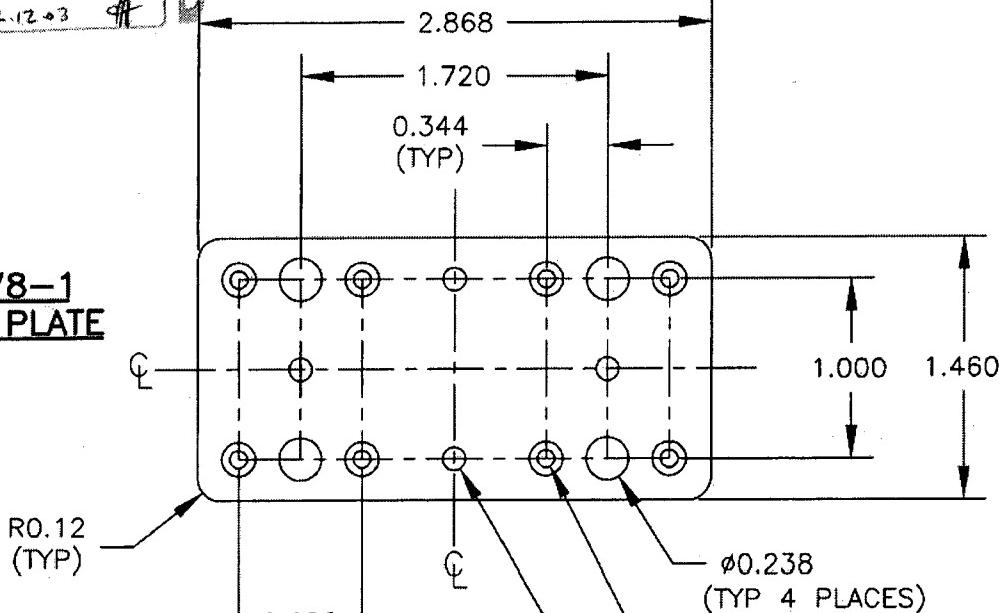


COPY  
ISSUED  
04

DESIGN	DP	DRAWN BY	DP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	✓	APPROVED	✓	DRAWING NO. D3178 REV. A
DATE	02.12.03			SHEET 1 OF 1
				SCALE 1:1
A	02.12.03	NEW ISSUE		

RELEASED  
02.12.03

D3178-1  
NUT PLATE



Ø0.238  
(TYP 4 PLACES)

DRILL #40 (Ø0.098)  
C'SINK Ø0.189x100'  
(TYP 8 PLACES)

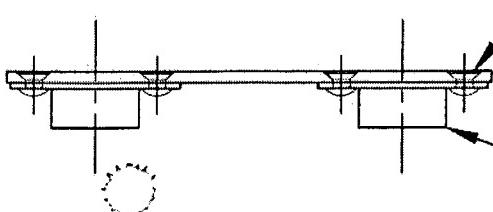
DRILL #30 (Ø0.129)  
(TYP 4 PLACES)

MS20426AD3W4 RIVET  
(8 PLACES)

D3178-1 NUT PLATE

MS21059L3NUT-PLATE  
(4 PLACES)

D3178-041  
NUT PLATE



NOTES, D3178-1 NUT PLATE:

- 1) PART IS SYMMETRIC ABOUT CENTERLINES
- 2) MATERIAL: 5052-H32/H34 SHEET 0.063 THICK (QQ-A-250/8)  
(REF DART SPEC. M5052H32S.063)
- 3) BREAK ALL SHARP EDGES 0.005-0.010
- 4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

25298

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